

WHAT IS CLAIMED IS:

1. A pressure reducing valve comprising:

a housing provided with a primary port and a secondary port;

a piston held within the housing to be movable in an axial direction of the valve and configured to separate an internal space of the housing into a primary pressure chamber connected to the primary port and a secondary pressure chamber connected to the secondary port, the piston including a primary pressure receiving face having a primary pressure receiving area that receives a primary pressure applied in one direction in the axial direction from a fluid within the primary pressure chamber, a back pressure receiving face having a back pressure receiving area equal to the primary pressure receiving area, the back pressure receiving face being adapted to receive the primary pressure applied in an opposite direction in the axial direction from the fluid within a back pressure chamber fluidically connected to the primary pressure chamber and kept at the primary pressure, and a secondary pressure receiving face that receives a secondary pressure applied in the opposite direction from a fluid within the secondary pressure chamber; and

a spring means configured to apply a force to the piston in the one direction.

2. The pressure reducing valve according to Claim 1, further comprising:

a rod provided within the housing, the rod being inserted into the piston to be movable relative to the piston in the axial direction to allow the back pressure chamber to be formed between the rod and the piston.